## <u>Attachment 5.1 – Supporting Documents</u>

## **Schedule**

## **Madera Region – IRWM Implementation Grant Application**

### **Table of Contents**

Summary Schedule	3
Project Schedules with Notes	
Project A – Grant Administration	7
Project B – Ash Slough Arundo Eradication and Sand Removal	11
Project C - Cottonwood, Dry and Berenda Creek Arundo Eradication and Sand Removal	17
Project D – Root Creek In-Lieu Groundwater Recharge Project	23
Project E – Sierra National Forest Fuels Reduction Project	27

# **Attachment 5.1, Summary Schedule**

#### Attachment 5.1, Comprehensive Projects Schedule

#### **Proposal Title: Madera Region IRWM Implementation Projects**

	Year		201	1						201	12										201	L3									201	4									2	015			
Project	Month	7 8	9	10 1	.1 12	1	2	3	4 5	6	7	8	9	10 1	11 12	2 1	. 2	3	4	5	6	7	8	9 10	11	12	1	2 3	4	5	6	7	8 9	9 10	11	12	1	2	3	4	5 6	5 7	8	9 1	0 11 12
Project A - Grant Administration																																													
Project B - Ash Slough Arundo Eradication Project																																													
Project C - MID Arundo Eradication Projects																																													
Project D - Root Creek Water District In-Lieu Project																																													
Project E - Sierra National Forest Fuels Reducation																																													

# <u>Attachment 5.1, Project A – Grant Administration</u>

### Attachment 5.1 - Project A - Project Schedule

Proposal Title: Madera Region IRWM Implementation Application Project Title: Project A - Grant Administration

Γ				1								1														1							<del></del>							—
	7 8	2011		12 1	2 .	2 4	5 6	2012	0 (	0 10	) 11 1	12	1 2 3 4		2013	0 0	9 10	11 1	2 1	2 2		<b>2014</b>		9 10	11 12	1 1	1 2	4	-	15		10 11	12	1 2 3	4   -	201			10 1	1 1 1 2
	/ 8	9 1	.0 11 .	12 1	2 :	3 4	5 6	) /	8 3	9 10	) 11 1	12 .	1 2 3 4	5 6	- / -	8 9	9 10	11 1	.2 1	2 3	4	5 6 /	8	9 10	11 12	1	2 3	4 :	5 6	/ 8	8 9	10 11	12	1 2 3	4 5	ь	/ 8	9	10 1.	1 12
Task 1 Project Administration		Ш																																						
1.1 Administer Contract																																								
1.2 Bi-weekly Phone Conversations with DWR																																								
1.3 Quarterly Project Meetings																																								
Task 2 Project Accounting		Щ																																						
2.1 Establish Accounting System for Each Project																																								
2.2 Track Project Expenditures		Ш																																						
2.3 Review and Submit Pay Requests to State																																								
2.4 Disburse Funds to Project Participants																																								
Task 3 Labor Compliance Plans																																								
Task 4 Reporting		Ш													Ш																									
4.1 Quarterly Progress Reports																																								
4.2 Annual Progress Reports		Ш																																						
4.3 Final Project Reports		$\Box$																																						
4.4 Data Management and Monitoring Reports																																								
4.5 Field Review Visits																																								
Task 5 Development of Financing																																								

# <u>Attachment 5.1, Project B - Ash Slough Arundo Eradication and Sand</u> <u>Removal</u>

#### Attachment 5.1 - Project B - Ash Slough Arundo Eradication and Sand Removal

#### **Schedule Notes**

Assumption – if DWR makes awards in June, 2011 as stated in the PSP, this project can begin implementation immediately (July 2011). In that case, it can be completed within a 42 month period (plus an additional 2 months for completing reports), ending in February 2015. That includes three years of Arundo treatment and sediment removal and subsequent monitoring. If the awards are delayed and project costs are not eligible for reimbursement as of July 1, 2011, the project schedule will be moved back one year. This is because of the timing requirements of Arundo eradication as explained below.

The following are notes explaining Tasks which are not obvious:

Task 9.1 – Application for renewal of 1602 permit - The application for extension of a 1602 permit will take place in early 2012 with the goal of completing it in March, several months before the current permit period ends.

Tasks 9.2, 9.3 and 11.2 – Sediment removal permits and sediment removal – It is difficult to accurately assess the time required for completing the sediment removal permits (SWPPP, 401 and 404). Work on these tasks will start immediately upon grant award; however it is unlikely that it will be completed before the winter rainy season when sediment removal is inadvisable. It is likely that sediment removal activities will start in the late spring of 2012. The appropriate time period for sediment removal is May through October, when the channels are dry. Sediment removal is also not possible where Arundo infestations are still in place. The three year sediment removal schedule will be overseen by the project manager who will direct the landowners to work in those portions of the channel where Arundo is not growing or has already been successfully eradicated.

Task 11.1. – Arundo eradication – Arundo eradication is a three-year process.

Year 1: The first year the Arundo canes are sprayed and mulched. The application of herbicide is generally done in September and October, just before the plants become dormant, in order for the process to result in a sufficient kill-rate of the Arundo to be worthwhile. Prior to spraying the Arundo is mulched and the canes allowed to re-grow to 4-6 feet in height. This is because untreated Arundo canes are often 15-20 feet tall. Spraying the herbicide upward to reach the top leaves can cause dangerous drift, harmful both for urban and agricultural areas. Arundo grows 1-2" per day, so canes are ready for spraying 30-60 days after the initial mulch. After the sprayed canes die, they are mulched in a second pass through the area. This is generally about 60 days after spraying takes place.

Year 2: In the second year, the canes are again mulched, sprayed and mulched with hand-cutting where necessary.

Year 3: In the third year the remaining sparse growth is eradicated either by spraying or by cutting the canes and daubing herbicides on the wound.

Task 14 — Surveys and monitoring -The County's 1602 permit requires monitoring if work is done during the bird nesting season of March 1 to August 1, so monitoring activities will be in place during the initial mulching in July and early August. At this time the biologists will also perform other surveys required by the permit. (see Attachment 5.2, page 3)

Other appropriate monitoring and surveys will be done during the times when sediment removal is taking place.

#### Attachment 5.1 - Project B - Project Schedule

Proposal Title: Madera Region IRWM Implementation Projects

Project Title: Project B	Ach Slough Arundo	Eradication and San	d Pamoval Project
Project little: Project B	- ASN SIOURN ARUNGO	Fragication and San	a kemovai Project

Project Title: Project b - Ash Slough Arthur Elaulcation and Sand Removal P	Year		2011					20	12							201	.3							2014							2015	 j		
	Month			0 11 12	1	2 3	4	5 6	7	8 9	10 1	1 12	1 2	2 3	4 5	6	7 8	9	10 11	1 12	1 2	3	4 5	6	7 8 9	10	11 12	1	2 3	4 !	5 6	7 8	9 10	11
Task 1 - Administration			1									+		<b>⊤</b> ¯		Ħ		Ť		+				1			<del>                                     </del>	十		+	$+$ $^{\dagger}$	7		十
1.1 Preparation of invoices to Applicant																																$\dashv \dashv$		+
Task 2 - Labor Compliance Program																												+				+		┱
			_				-													+ +								+		-	+ +	+	┝┼┼╄	#
2.1 Submission of County's Labor Compliance program to DWR			_	+							-	-		-		-				+							$\vdash$	+			+-+	$+\!\!-\!\!\!-$	+++	+
Task 3 - Reporting																				+								_			+ +	$+\!-\!\!\!\!-$	+++	+
3.1 Preparation and submission of quarterly project reports to Applicant																				+								4			+ +	$+\!-\!\!\!\!-$	+++	+
3.2 Preparation and submission of annual project reports to Applicant					-															+								_				$+\!-\!\!\!\!-$	+++	+
3.3 Preparation and submission of final project report to Applicant										-										-								#		_	+ +	$+\!-\!\!\!\!-$	+++	+
3.4 Quarterly meetings of prject proponents and Applicant																												4			-	!	+++	+
Task 4 - Development of Financing			_		-																							$\dashv$			+		+++	_
4 Development of Financing - Not Applicable			_		-																							$\dashv$			+		+++	_
Task 5 - Land Purchase/ Easement																												_					+++	+
5 Land Purchase/Easement - not applicable																												_				'	+	_
Task 6 - Assessment and Evaluation																																'	$\sqcup \sqcup$	_
6 Assessment and Evaluation – not applicable																																'	$\sqcup \sqcup$	_
Task 7 - Final Deisgn						$\perp \perp$									igspace	$\sqcup \bot$				$\bot \bot$	$\perp \downarrow \downarrow$							$\perp$	$\bot$		$\perp \perp$	'	$\sqcup \sqcup$	_
7 Final Design, Deliverables: – not applicable						$\perp \perp$									igspace	$\sqcup \bot$				$\bot \bot$	$\perp \downarrow \downarrow$							$\perp$	$\bot$		$\perp \perp$	'	$\sqcup \sqcup$	_
Task 8 Environmental Documentation															$oxed{oxed}$	$oxed{oxed}$																'	$\sqcup \sqcup$	
8.1 Preparation and filing of Notice of Exemption															$oxed{oxed}$																	'	$\sqcup \sqcup \bot$	
Task 9 - Permitting																																		
9.1 Create application for renewal of 1602 Stream Bed Alteration Permit			$oldsymbol{ol}}}}}}}}}}}}}}}$													ШΤ																		$oldsymbol{ol{ol{ol}}}}}}}}}}}}}}}}}$
9.2 Create application for 401 and 404 permits																																$\Box$		
9.3.1 Draft Landowner Sub-permit/Agreement for sediment removal work																																$\neg$		
9.3.2 Review and comment on Sub-permit/Agreement by RWQCB																																$\neg \neg$		
9.3.3 Outreach to adjacent landowners																																$\neg$		
9.3.4 Obtain signed Sub-permits/Agreements from landowners																																$\top$		
9.4 Draft Stormwater Pollution Protection Plan for SWQCB																				1 1								$\top$				$\dashv$	$\Box$	$\top$
9.5 Draft Dust Control Plan to comply with Air District requirements																				1 1								$\top$				$\dashv$	$\Box$	$\top$
Task 10 - Implementation Contracting																				1								$\top$				$\dashv \dashv$		+
10.1.1 Draft 3-year contract for Arundo removal with CWD																				1								$\top$				$\dashv \dashv$		+
10.1.2 Approval of contract by County and CWD																				1 1								+				+	-+-	+
Task 11 - Implementation																				1 1								+				+	$\Box$	+
11.1.1 Pre-spray mulching							-													+								+		-	+ +	+	+++	+
11.1.2.1 Spray Arundo with herbicide.					<b>-</b>									-						+								+			+	+	+++	+
							-													-								+		-	+ +	+	+++	+
11.1.2.2 Remove Arundo by cutting and daubing herbicide 11.1.3 Post-spray mulching																												+	+ +		+ +	$+\!-\!\!\!\!-$	+++	+
	ļ.																											+			+ +	$+\!-\!\!\!\!-$	+++	+
11.2.1 Notices sent to adjacent landowners					-															+								+			+ +	$+\!-\!\!\!\!-$	+++	+
11.2.2 Sediment removal																												+			-	!	+++	+
Task 12 - Environmental Compliance/Mitigation			_		-																							$\dashv$			+		+++	_
12 Environmental Complianc/Mitigation - not applicable																				1								+				'	+++	+
Task 13 - Project Management and Oversight																												_				!	$\sqcup \sqcup$	_
13.1.1 Oversight of Arundo spraying and mulching activities																																'	$\sqcup \sqcup$	_
13.1.2 Oversight of Sediment removal																												$\bot$				'	$\sqcup \sqcup$	$\bot$
13.2 Data Collection and Monitoring Oversight																												$\bot$				'	$\sqcup \sqcup$	$\bot$
Task 14 - Permits and Monitoring																																'	1	
Obtain 1602 permit renewal																																		
14.1 Surveys and monitoring required by DFG 1602 permit																																$\neg$		
14.1.1 Kit fox surveys ( surveys)																																$\dashv$		
14.1.2 Marking desired vegetation																				1 1								$\top$				$\dashv$	$\Box$	$\top$
14.1.3 Avian surveys and monitoring																												+				+	$\Box$	+
Obtain ACE SWPPP							+	+				+		+	++-	H				+ +	++	+			+ + -	$\vdash$	++	+	+	-	++	+	++	+
		$\vdash$										+	$\vdash$	-						+	+					Н	++	+	+	-	++	+	++	+
14.2 Monitoring and inspection for SWPPP												4		_						+	$\perp$	_				Щ	$\bot$ $\bot$	$\bot$		_	$\bot$	<u> </u>	++	$\bot$
Obtain ACE 401/404 permits																<u> </u>				$\perp \perp \parallel$	$\perp \downarrow \downarrow$					Ш		$\perp \!\!\! \perp$				'	$\sqcup \sqcup \bot$	$\perp$
14.3 Monitoring and inspection for ACE 401/404 permits																										L						'		
14.4.1 Monitoring and Report on the kill rate on Arundo																																		
14.4.2 Report on cubic yards/tons of sediment removed																					<u> </u>		7					$\neg$						$\neg$
			+				1	+		+				+	<del>                                     </del>	$\vdash$	_	-		╄	++	$\dashv$	+ +	+				十	1 1	+	1 1	+	$\Box$	十
14.4.2 Report on cubic yards/tons of sediment removed 14.4.3 Report on channel capacity																												土					廿	士

# Attachment 5.1, Project C - Cottonwood, Dry and Berenda Creek Arundo Eradication and Sand Removal

# Attachment 5.1 – Project C – Cottonwood, Dry and Berenda Creek Arundo Eradication and Sand Removal

#### **Schedule Notes**

#### Task 1: Administration

1.1 – Preparation of invoices to Applicant – This will be done on a monthly basis and will continue for the life of the grant.

#### Task 2: Labor Compliance Program

2.1 – Submission of County's Labor Compliance program to DWR – Since the County has other DWR grants it is likely that it already has a Labor Compliance Program registered with DWR. If not, this task will be done by a contractor in the first month of the grant contract.

#### Task 3: Reporting

- 3.1 3.3 These tasks will be scheduled to complete reports at time periods required by the grant contract.
- 3.4 Participation in partnership meetings will be required on a quarterly basis throughout the life of the project

#### Task 8: Environmental Documentation

8.1 Preparation and filing of Notice of Exemption – The County will submit on behalf of MID.

#### Task 9: Permitting

- 9.1 Create application for five year renewal of 1602 Stream Bed Alteration Permit this will be done in 2012-2013 before the current permit expires.
- 9.2 Create application for ACE/RWQCB 401 and 404 permits for sediment removal This is estimated to take 5 months for completion. It will be completed as soon as possible so that sand removal activities can commence.
- 9.3.1 9.3.3 These activities will be done as soon as possible after the permits are issued so that sediment removal activities can commence.
- 9.4 Draft Stormwater Pollution Protection Plan for SWQCB This will be done in the spring and summer prior to commencement of sediment removal activities.

#### Task 11: Implementation

11.1.1-11.1.3-- Arundo Eradication - The timing of Arundo eradication tasks are very specific. Arundo must be sprayed when it is going dormant so the herbicide is pulled down to the rhizomes, which is the only way to kill the plant. Arundo dormancy depends on temperature and rainfall, but generally spraying activities should take place between mid-September and early November. In order to control the height of Arundo when spraying activities take place, the canes are shredded about 60 days before spraying occurs. This allows the replacement canes to grow to a height of 5 feet, which

is optimal for effective spraying. About 30 days after the canes are sprayed, they are again mulched. This mulch stabilizes the banks and prevents canes from washing down and choking bridges or other narrow areas, which can be a major risk for flood.

- 11.2 Notices sent to Landowners—this will occur each year in the summer before Arundo eradication or sediment removal.
- 11.3 Sediment Removal Sediment removal activities can take place wherever the sand is dry and there is no Arundo growing. (There may be additional constraints imposed by the permits which will be obtained for this activity). Since Arundo generally grows near water but not directly in water, creek channels may be free from Arundo in several target areas of the project.

#### Task 13: Project Management and Oversight

- 13.1.1-13.1.2-- Oversight will take place at the same time as the activities overseen.
- 13.2 Data collection and monitoring oversight will take place at the same time as the activities overseen.

#### Task 14: Surveys, Monitoring and Reports

- 14.1.1 Surveys and monitoring required by DFG 1602 permit –These activities will take place just prior to Arundo eradication and sediment removal commencing, since this is the time when activities could disturb nesting birds.
- 14.1.2 Conduct baseline studies this will be done just prior to work commencing each year.
- 14.2 14.3 We are not certain of what monitoring and inspections will be required by these permits, but expect that they will have to take place just prior or during the sand removal activities.
- 14.4.1 Monitoring and report on Arundo eradication kill rate This monitoring will take place every year in March and April after the Arundo has re-sprouted.
- 14.4.2 Report on sediment removed This will take place when all sand removal activities have been completed.
- 14.5.1-14.5.2 DFG Permit Renewal Fees and 401and 404 Permit Fees are anticipated to occur at the end of the permitting process
- 14.6—Survey contingencies could occur anytime after the DFG permit renewal

#### Task 15: Implementation Contingency

15 Implementation contingency will occur during the life of the project.

#### Attachment 5.1 - Project C - Schedule

Proposal Title: Madera Region IRWM Implementation Application

Project Title: Project C - Madera Irrigation District Arundo Eradication and Sand Removal Project

Year	20	11	l l			2012							2013							2014						201	5		
Month			12 1	. 2 3	4 5		, s	9 10 1	11 12	1	2 3	4 5			9 10	11	12 1	1 2	3 4		8 0	10 11	12	1 2	3 4 5			9 1	0 11 12
Task 1 - Administration	, 6 9	10 11	1	2 3	7	<del>/                                    </del>	0	2 10 1	-1 14	1	- 3	7 3	0 1	, 0	J 10	, 11	1		<del></del>	9 0 /	3	10 11	14	1 -	J 4 3			71	111111
1.1 Preparation of invoices to Applicant																										++	++	+	++
Task 2 - Labor Compliance Program																										+	++	+	++
2.1 Submission of County's Labor Compliance program to DWR			t															1 1	1 1								+	+	++
Task 3 - Reporting						1												1 1	1 1	+ + +							+	-+-	+
3.1 Preparation and submission of quarterly project reports to Applicant																											+	-+-	+
3.2 Preparation and submission of annual project reports to Applicant																											+	-+-	+
3.3 Preparation and submission of final project report to Applicant			$\vdash$		-	+ +		+ +											+ +	+ + +						+ +	+++	+	+++
3.4 Participate in Partnership Meetings																										++	+++	+	++
Task 4 - Development of Financing																							1	+ +			+++	+	+
4 Development of Financing - Not Applicable			$\vdash$		+			+ +			+ +	+ +						+ +	+ +	+ + +	+ +					++	+++	+	++
Task 5 - Land Purchase/ Easement			+			1		+ +				+						1 1	1	+ + +	+		1	+ +			+++	+	+
5 Land Purchase/Easement - not applicable			+			1		+ +				+						1 1	1	+ + +	+		1	+ +			+++	+	+
Task 6 - Assessment and Evaluation			$\vdash$		-	+ +		+ +			+	+ +				+ +		+ +	+ +	+ + +	+ +		<del> </del>	+ +		+ +	++	+	+
			$\vdash$		-	+ +		+ +			+	+ +				+ +		+ +	+ +	+ + +	+ +		<del> </del>	+ +		+ +	++	+	+
6 Assessment and Evaluation – not applicable					-	1		+			+							+	+	+			<del>                                     </del>	-		+	+++	+	++
Task 7 - Final Deisgn			+			+ +	1	+ +			+ +							+ +	+ +	+			<del>                                     </del>				+++	$-\!\!\!\!+\!\!\!\!-$	+
7 Final Design, Deliverables: – not applicable			$\vdash$		-	+ +		+ +			+ +							+ +					<b>├</b>			+ +	++	+	+
Task 8 Environmental Documentation			$\vdash$		_	+ +		+ +										1		+			<b> </b>			+	$\rightarrow \rightarrow$	<del></del>	+
8.1 Preparation and filing of Notice of Exemption-not applicable			$\vdash$		_	+ +		+ +										1		+			<b> </b>			+	$\rightarrow \rightarrow$	<del></del>	+
Task 9 - Permitting						1						_   _									_   _		<u> </u>				$\longrightarrow$		$\bot$
9.1 Create application for renewal of 1602 Stream Bed Alteration Permit						1						_   _									_   _		<u> </u>				$\longrightarrow$		$\bot$
9.2 Create application for 401 and 404 permits						1						_   _									_   _		<u> </u>				$\longrightarrow$		$\bot$
9.3.1 Draft Landowner Access Agreement for sediment removal work																											$\rightarrow$		$\bot$
9.3.2 Legal review of Access Agreement and comment																											$\rightarrow$		
9.3.3 Obtain signed Access Agreements from landowners																													
9.4 Draft Stormwater Pollution Protection Plan for SWQCB																													
Task 10 - Implementation Contracting																													
10 Implementation Contractingnot applicable																													
Task 11 - Implementation																													
11.1.1 First year Arundo eradicationmulch, spray, and daub																													
11.1.2 Second year Arundo eradicationmulch, spray, and daub																													
11.1.3 Third year Arundo eradicationmulch, spray, and daub																													
11.2 Notices sent to adjacent landowners																													
11.3 Sediment removal																													
Task 12 - Environmental Compliance/Mitigation																													
12 Environmental Complianc/Mitigation - not applicable																													
Task 13 - Project Management and Oversight																													
13.1.1 Oversight of Arundo spraying and mulching activities																											$\dashv$	$\neg$	
13.1.2 Oversight of Sediment removal																											$\dashv$	$\neg$	
13.2 Data Collection and Monitoring Oversight																											+	+	
Task 14 -Other Costs												+ +							1	1 1 1							+++	+	+
14.1.1 Raptor and avian surveys and monitoring								+ +				+ +									+ +						+++	+	+
14.1.2 Conduct baseline studies																											+	-+-	+
14.2 Monitoring and inspection for SWPPP																											+	-	+
14.3 Monitoring and inspection for ACE 401/404 permits			$\vdash$		-						+ +							+ +	+ +	+ + + + + + + + + + + + + + + + + + + +						+ +	+++	+	+++
14.4.1 Monitoring and Report on the kill rate on Arundo			+		+					┢┼								+ +						+		++	+++	+	+++
14.4.1 Monitoring and Report on the kill rate on Artifido  14.4.2 Report on cubic yards/tons of sediment removed			<del>   </del>			+ + -	+ +	+ +	+					+			-	+ -					$\vdash$		+ +	+	+	+	++
14.4.2 Report on cubic yards/tons of sediment removed  14.5.1 DFG Permit Fee Renewal			+ +		-	+	+	++		$\vdash \vdash$	+	+		+	_	+		++	+	+++	+		$\vdash \vdash$	+		++	++	+	++
14.5.1 DFG Permit Fee Renewal  14.5.2 401 and 404 Permit Fees						+	+	++		$\vdash \vdash$	+	+		+	_	+		++	+	+++	+		$\vdash \vdash$	+		++	++	+	++
																										+	+	+	+
14.6 Contingency for future surveys that may be required at permit renewal			+																							+	+	+	+
Task 15-Implementation Contiguency																								+		++	+	+	+
15 Implementation Contingency																											<u>Ш</u>		<u>ш</u>

# <u>Attachment 5.1, Project D – Root Creek In-Lieu Groundwater Recharge</u> <u>Project</u>

### Attachment 5.1 - Project D - Root Creek In-Lieu Groundwater Recharge

#### **Schedule Notes**

RCWD anticipates having all permits and approvals by the anticipated grant award date in June 2011. RCWD anticipates the United States Bureau of Reclamation finalizing their approval for a Section 215 water contract once a down payment is submitted. As a result, RCWD can begin finalizing designs in July 2011 and begin construction within five months of the contract award. Project construction would be completed by the end of May 2012. The project would be completed by the end of July 2012.

Attachment 5.1 - Project D - Project Schedule

Proposal Title: Madera Region IRWM Implementation Application Project Title: Project D - Root Creek In-Lieu Groundwater Recharge Project

		2010							2011								20	2012			
	Oct	Nov	Dec	Jan	Feb	Mar /	Apr	May Ju	lut nut	I Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar A	Apr	May Ju	lut nut	
Task																					
Task 7: Design Approval from MID and USBR																					
Task 7: Finalize Pipeline and Turnout Design																					
Task 7: Complete Lateral Pipeline Design																					
Task 8: Secure Contract for Section 215 Water																					
Task 10: Bid Solicitation																					1 1
Task 11: Construction																					
Task 11.1: Mobilization/On-Going Duties																					1 1
Task 11.2: MID/RCWD Turnout Structure																					1 1
Task 11.3: 48-inch Pipeline Construction																					
Task 11.4: PVC Lateral Construction																					
Task 11.5: Pump Station Connections																					
Task 11.6: Facility Testing																					1 1
Task 11.7: De-mobilization																					
Task 13: Construction Administration																					1 1
Task 13.1: Construction Administration																					T
Task 13.2: Construction Inspection & Observation																					
Task 13.3: Record Drawings																					
Final Project Acceptance																					
							-	-	-							_	_	_			1



Anticipated Construction Start Date



# <u>Attachment 5.1, Project E - Sierra National Forest Fuels Reduction</u> <u>Project</u>

#### Attachment 5.1 – Project E – Sierra National Forest Fuels Reduction Project

#### **Schedule Notes**

The USFS has identified several project activity areas that are in need of treatment to reduce fuels and move areas towards old-growth characteristics. These project areas all contribute to the goal of increasing forest health and the objective of reducing fuels in the WUI area, reducing post-fire flood hazards and benefitting the watershed. Several of these areas have already received some treatment but are still in need of further work to maximize these benefits (Cedar Valley, Foster, Nehouse, and Walker Mine/Topping). Other areas have already been analyzed under NEPA but have not had any work done (Double Gate, Grave/Yard, and Swortzel), and two areas (Grey's Mountain and Kelty) are still in need of NEPA/CEQA analysis. By including several project areas in this proposal under varying stages of readiness, the USFS can most efficiently complete the work needed to meet the goals and objectives. CEQA requirements can be completed fairly quickly and treatments completed in some areas while the NEPA/CEQA is completed for the other areas.

#### <u>Task 1 – Administration</u>

Invoices will be prepared on a quarterly basis.

#### Task 2 - Labor Compliance Program

Submission of the Forest Service Labor Compliance program to DWR will be completed immediately following grant award.

#### Tasks 7 and 8 – Final Design and Environmental Documentation

The NEPA/CEQA schedule is determined based on year the USFS plans on implementing the projects. The time required to complete NEPA, including all public comment periods, is then back estimated to the start date.

#### Tasks 10, 11, and 13 – Implementation, Contracting, and Oversight

It is expected that implementation in any project area will be conducted as color-coded on the project schedule, however actual on-the-ground acres to be treated at any time is determined during unit layout as part of the contract/project administration. This is necessary to provide flexibility for the Forest Service and their contractors, and is essential to getting the most acres treated in a given season because of environmental and regulatory constraints (e.g. Limited Operating Periods for wildlife, weather and ground conditions, soil and water protection measures, availability of equipment and personnel). Although soil compaction is minimized during mastication by having the

machine walk over a layer of slash, some disturbance does occur. The Cedar Valley project is in a watershed that has a high road/trail density and has had commercial thinning and other activities in recent years. The potential for cumulative watershed effects makes it necessary to space treatments over a several years to allow recovery time and minimize cumulative impacts.

#### <u>Task 12 - Environmental Compliance/Mitigation/Enhancement</u>

Forest Service BMPEP monitoring is done to endure that BMPs were implemented and effective. Problems found in the implementation or effectiveness is then used to modify BMPs and management prescriptions for future projects. Implementation monitoring is done either during or just after project activities. Effectiveness monitoring is used to determine if the BMPs that were implemented were effective in protecting water resources. Therefore, these are done at least one winter after completion of the project activities.

#### Attachment 5.1 - Project E - Project Schedule

#### Proposal Title: Madera Region IRWM Implementation Projects Project Title: Project E - Sierra National Forest Fuels Reduction

	Year				2009								2010							201	.1								2012			
	Month	1	2 3	4	5 6	7 8	9	10 11	12	1	2 3	4 5	6 7	8	9 10	11 12	1 2	3	4	5 6	7	8 9	10 1	1 12	1	2	3	4 5	6	7 8	9 1	10 11
Task 1 - Administration																																
1.1 Preparation of invoices to Applicant																																
Task 2 - Labor Compliance Program																																
2.1 Submission of Forest Service's Labor Compliance program to DWR																																
Task 3 - Reporting																																
3.1 Preparation and submission of quarterly project reports to Applicant																																
3.2 Preparation and submission of annual project reports to Applicant																																
3.3 Preparation and submission of final project report to Applicant																																
3.4 Quarterly meetings of project proponents and Applicant																																
Task 4 - Development of Financing																																
4 Development of Financing - not applicable																																
Task 5 - Land Purchase/ Easement																																
5 Land Purchase/Easement - not applicable																																
Task 6 - Assessment and Evaluation																																
6 Assessment and Evaluation – not applicable																																
Task 7 - Final Design																								İ								
7.1 Develop Proposed Action and Scoping for Grey's and Kelty																																
Task 8 Environmental Documentation																																
8.1 Provide CEQA compliance information for projects with existing NEPA																																
8.2 Preparation of NEPA EA/EIS/CEQA documentsGrey's and Kelty																																
Task 9 - Permitting																																
9.1 Not applicable																																
Task 10 - Implementation Contracting																																
10.1 Prepare and advertise contract(s)																																
10.2 Award contract(s)																																
Task 11 - Implementation																																
11.1 Masticate Stands						565	acres	S						1	L50 <mark>acre</mark>	s							200 ac	res						600	acres	
11.2 Hand Thin Plantations						250	acres	5						1	L40 acr	es						160	acres							550	acres	
11.3 Tractor pile slash																						100	acres							300	acres	
11.4 Burn piled slash																							10	0 acr	es						30	00 acre
Task 12 - Environmental Compliance/Mitigation																																
12 BMP Monitoring and other monitoring required by NEPA/CEQ																																
Task 13 - Project Management and Oversight																																-
13.1 Mastication Contract Administration																																
13.2 Mastication Program Management																																
13.3 Hand Thinning Project Administration																																
13.4 Hand Thinning Program Administration																																
13.5 Tractor Piling Project Administration														П																		
13.6 Tractor Piling Program Mangement																																
13.7 Burning Project Administration																																
13.8 Burning Program Management																				1												
NOTE: Activity area color codes for tasks 10, 12, and 13 would mirror those for task 11 but were not colored for visual reasons	I.	egend	l:	Fo: Ce Ne	t specific ster dar Valle haouse alker Min	у	·	rea			Gra Swo	ible Gate ve/Yard ortzel y's Moun	tain	<u> </u>	•	•	-		•	Grant A	ward	•			<u>-                                    </u>	•	•		•	<u>'</u>		

5.1 - 31 Page 1 of 2

#### Attachment 5.1 - Project E - Project Schedule

#### Proposal Title: Madera Region IRWM Implementation Projects Project Title: Project E - Sierra National Forest Fuels Reduction

Ye	ear				2013	3								2014									20	015				$\Box$
Mor	ith 1	2	3	4 5	6	7 8	8 9	10	11 12	2 1	2 3	4	5	6	7 8	9	10	11 12	2 1	2	3	4 5	5 6	5 7	8	9 10	) 11	12
Task 1 - Administration																												
1.1 Preparation of invoices to Applicant																												
Task 2 - Labor Compliance Program																												
2.1 Submission of Forest Service's Labor Compliance program to DWR																												
Task 3 - Reporting																												$\Box$
3.1 Preparation and submission of quarterly project reports to Applicant																												
3.2 Preparation and submission of annual project reports to Applicant																												
3.3 Preparation and submission of final project report to Applicant																												
3.4 Quarterly meetings of project proponents and Applicant																				.								
Task 4 - Development of Financing																							1		Ħ		T	
4 Development of Financing - not applicable																											$\top$	
Task 5 - Land Purchase/ Easement																							1	$\top$	1		1	$\neg$
5 Land Purchase/Easement - not applicable																							1	$\top$	1		1	$\neg$
Task 6 - Assessment and Evaluation	+																					_	+	${}^{+}$	t		+	$\neg$
6 Assessment and Evaluation – not applicable															1		-					+	+	T	$\vdash$	+	+	$\dashv$
Task 7 - Final Design	+																		$\mathbf{H}$		$\vdash$	+	+-	+	$\vdash$	+	+	-
7.1 Develop Proposed Action and Scoping for Grey's and Kelty																					<del>-                                    </del>	+	+	+	$\vdash$	-	+	$\dashv$
Task 8 Environmental Documentation	_					+				1 +									1	_	-	+	+	+	+	-+	+	=
8.1 Provide CEQA compliance information for projects with existing NEPA						+				1 +									1	_	-	+	+	+	+	-+	+	=
8.2 Preparation of NEPA EA/EIS/CEQA documentsGrey's and Kelty	$\vdash$									1									$\vdash$	$\dashv$	$\vdash$	+	+-	+-	$\vdash$	$-\!\!\!+\!\!\!\!-$	+	$\rightarrow$
Task 9 - Permitting	+									+ +									1	_	$\vdash$	-	+	+	₩	$-\!\!\!+\!\!\!\!-$	$+\!-\!\!\!-$	
	$\vdash$		_						_	1				_	+				+		+	+	+	+'	₩	-+	+	$\dashv$
9.1 Not applicable	+									1				-	-				+		$\vdash$	+	+	<del>                                     </del>	$\vdash$		$+\!-\!\!\!\!-$	
Task 10 - Implementation Contracting	$\vdash$									1					-				+		$\vdash$	+	+	<del>                                     </del>	$\vdash$		$+\!-\!\!\!\!-$	
10.1 Prepare and advertise contract(s)	_								_					_					1		$\vdash$	-	+-	<del> </del>	$\vdash$	$-\!\!\!+\!\!\!\!-$	$+\!-\!\!\!\!\!-$	
10.2 Award contract(s)	+								_										1		$\vdash$	-	+-	<del> </del>	$\vdash$	$-\!\!\!+\!\!\!\!-$	$+\!-\!\!\!\!\!-$	
Task 11 - Implementation	<u> </u>									1											$\vdash$	+	4—	<b>↓</b> —'	<del></del>		$+\!-\!\!\!\!-$	
11.1 Masticate Stands	_					60	0 acre								400	acre					$\vdash$	_	—	<u> </u>	$\longmapsto$	$-\!\!\!\!+\!\!\!\!\!-$	4—	
11.2 Hand Thin Plantations	_							550 a	cres								490a	cres			$\vdash$		—	<u> </u>	$\sqcup$	-	$\perp \!\!\!\!\perp \!\!\!\!\perp \!\!\!\!\!\perp \!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	
11.3 Tractor pile slash	_					300	<mark>0</mark> acre								300	acre					$\vdash$		—	<u> </u>	$\sqcup$	-	$\perp \!\!\!\!\perp \!\!\!\!\perp \!\!\!\!\!\perp \!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	
11.4 Burn piled slash	_						300	acres									300 a	cres			$\vdash$			<u> </u>	₩.		!	
Task 12 - Environmental Compliance/Mitigation										$\perp$											$\vdash$		Щ	<u> </u>	ш		!	
12 BMP Monitoring and other monitoring required by NEPA/CEQ																					$\vdash \vdash$						$\perp \!\!\! \perp \!\!\! \perp \!\!\! \perp \!\!\! \perp \!\!\! \perp$	
Task 13 - Project Management and Oversight																					$\vdash \vdash$		Щ	Щ'	$\perp$		$\perp \!\!\! \perp \!\!\! \perp \!\!\! \perp \!\!\! \perp \!\!\! \perp$	
13.1 Mastication Contract Administration																					$oxed{oxed}$		$\bot$	<u> </u>	$\sqcup$			
13.2 Mastication Program Management																					$oxed{oxed}$		$\bot$	<u> </u>	$\sqcup$			
13.3 Hand Thinning Project Administration	L																			i								
13.4 Hand Thinning Program Administration	L																			i								
13.5 Tractor Piling Project Administration																				ı	ı							ŀ
13.6 Tractor Piling Program Mangement																												
13.7 Burning Project Administration																												
13.8 Burning Program Management																				Ţ							$T^{T}$	
		•	Le	gend:	N	ot spe	cific to	o activi	ity are	a	•		Doubl	e Gate	!													
NOTE: Activity area color codes for tasks 10, 12, and 13 would				-		oster							Grave															
mirror those for task 11 but were not colored for visual reasons						edar V	allev/						Swort															
						ehaou								Mour	ntain													
								Toppir	ng				Kelty															
							,	- 1-1-11	5				,															

5.1 - 33